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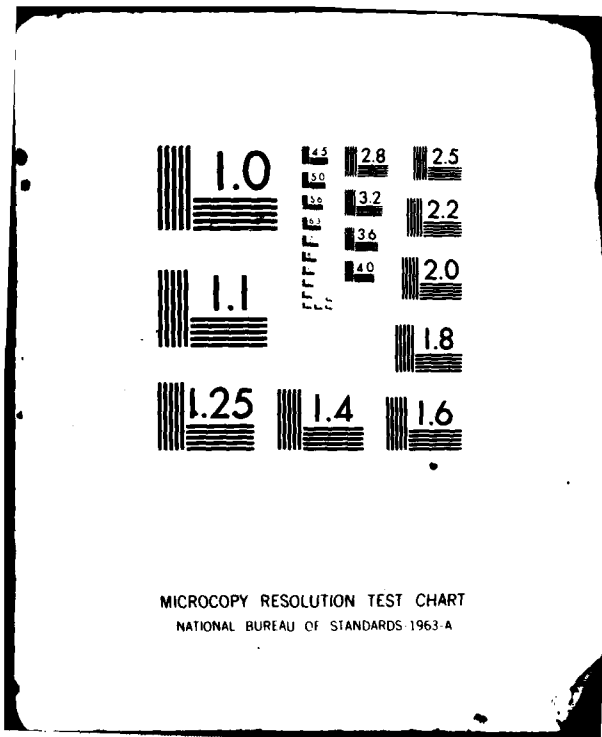
ARMY RESEARCH INST OF ENVIRONMENTAL MEDICINE NATICK MA F/G 5/10
COMMENTS ON BERLIN AND LANGUIS' 'HEMISPHERIC CORRELATES OF THE --ETC(U)
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This note comments on an article by Berlin and Languis, the contents of which appears to have been changed in a questionable manner subsequent to its having been reviewed by the author prior to publication.		

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) In 1980, the Department of Defense (DoD) and the Military Services, in cooperation with the Department of Labor, sponsored a large-scale research project to assess the vocational aptitudes of American youth. A national probability sample of approximately 12,000 young men and women, selected from participants in the National Longitudinal Survey (NLS) of Youth Labor Force Behavior, were administered the Armed Services Vocational Aptitude Battery (ASVAB). The young people tested were representative of all youth in the United States,		

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Pages 16 through 23 years old. The analyses conducted in the profile study focused upon young people who were 18 through 23 at the time of ASVAB testing. The ASVAB is used by the Military Services to determine eligibility for enlistment and qualification for assignment to specific military jobs. Four ASVAB subtests are combined to form the Armed Forces Qualification Test (AFQT), a general measure of trainability and a primary criterion of enlistment eligibility. AFQT scores, reading grade level, and vocational aptitude composite scores were used as indices for comparing the test performance of civilian and military groups. The analyses included comparisons of the 1980 youth population with the World War II reference population and with military recruits, as well as comparisons of subgroups within the youth population on the basis of age, sex, race/ethnicity, level of education, socioeconomic status, and geographic region.

The report contains five sections and three appendices, as well as a comprehensive bibliography of relevant literature. Section 1 presents a brief introduction. The study design, sampling procedures, and data analysis are described in Section 2. Section 3 presents a comparison of characteristics of the 1980 youth population with military personnel. In Section 4, the mean scores of the 1980 youth population subgroups are compared. Section 5 summarizes the results documented in the report. The appendices contain detailed statistical data. An executive summary is included at the front of the report.

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Comments on Berlin and Languis' "Hemispheric Correlates of the Rod-and-Frame Test"

Bernard J. Fine

U.S. Army Research Institute of Environmental Medicine, Natick, MA.

Berlin and Languis (1981) have published an article entitled "Hemispheric Correlates of the Rod-and-Frame Test" in this journal. Having served as a pre-publication "reader" for this article, I would like to comment on it.

On May 16, 1980, I wrote the following comments about the paper to the Editor:

"The discussion is greatly over-generalized from the data and it would be wasteful to indulge in a critique of the reasoning given certain basic flaws: The authors base their study on their "inferred" tests of hemisphere function. The WISC Digit Span and PMA Verbal Meaning are inferred to tap left hemisphere and the WISC Block Design and PMA Spatial Relations are inferred to tap right hemisphere function. In Table 1, for male Ss, the two measures inferred to tap left hemisphere function have an $r = .05$, so are obviously unrelated. Which, then, taps left hemisphere function? The two measures inferred to tap right hemisphere function are, indeed, significantly related ($r = .74$); however, the PMA Verbal (left hemisphere) is significantly related to both of the right hemisphere measures ($r = .66$ and $.67$). Thus, one questions the validity of the criterion measures. If one looks at the female relationships, Table 2, a different but equally dismal picture emerges. The two inferred left hemisphere measures are related, but quite low ($r = .39$). The two right-hemisphere measures are not significantly related and the highest correlation between criteria is between PMA Verbal and PMA Spatial which are inferred to tap opposite sides of the brain. On the basis of this alone, I can't proceed to get involved in any detailed discussion of results and consider the paper unpublishable."

In June, 1980, I received a copy of a letter from the Editor to Berlin and Languis in which my above comments were quoted to them verbatim, starting from "In Table 1....". Sometime later, in 1981, I received a complimentary copy of the published article by Berlin and Languis. Upon reading the article, I dis-

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covered that all references to the WISC Digit Span, PMA Verbal and PMA Spatial tests and test results had been deleted; the published version reports only the WISC Block Design results. Furthermore, the article is written as if the eliminated measures had never been used or, put another way, the article has been tailored to fit the data from one of four tests.

I indicated my concern about this (August, 1981), reminding the Editor that I had considered the article to be unpublishable because the various inferred criterion measures for left and right hemisphere function were invalid. I noted my dismay that the article not only was published with three of the original measures eliminated but that it had been rewritten in such a manner as to appear that the authors had made a clearcut hypothesis and had tested and supported it. I also questioned the morality of this procedure.

The Editor indicated agreement with these comments (October 14, 1981), expressed the feeling that the "issue definitely needs to be addressed," and invited me to prepare a one-page note on the matter.

I responded at some length (October 21, 1981), noting that my concern was not only with Berlin and Languis but with the editorial process as well; that I felt that there had been a breach of acceptable scientific behavior which should be corrected. I suggested that the appropriate thing to do was to print a retraction of the study so that readers could disregard it. My permission for the Editor to forward copies of my letters of concern to Berlin and Languis was also given.

I have not had a reply as of this date (February 24, 1982), so I am submitting my comments so that they can be brought to the attention of the readers of this journal. At this time, I am unaware of a retraction of the article having

been printed or of any correspondence toward that objective that may have transpired between the Editor and the authors.

References

Berlin, D.F. and Languis, M.L. Hemispheric correlates of the rod-and-frame test. Perceptual and Motor Skills, 1981, 52, 35-41.



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